

Abstract

The method serves to determine the vibrational state of turbine blades, arranged on a rotor shaft, mounted such as to rotate in a housing and/or of guide vanes. At least one electromagnetic wave is transmitted into a flow channel in the vicinity of the blades, using means for the generation of at least one electromagnetic wave. The electromagnetic waves are at least partly reflected from at least one blade. The reflected part of the at least one electromagnetic wave is received by means for receiving and the vibrational state of the corresponding blade is determined from a signal corresponding to the at least one received electromagnetic wave.